REMARKS

Examiner Mai is thanked for his ongoing examination of our application. We had originally responded to Examiner's first rejection after RCE on March 10 2003. In doing so, we inadvertently used an earlier version of the claims in the section "**VERSION WITH MARKINGS TO SHOW CHANGES MADE**" so Examiner issued a Notice of Non-compliance. We apologize for the error and now submit amendments that are based on the most recent version of the claims.

Reconsideration of the rejection of all remaining claims is respectfully requested. We wish to comment on Examiner's remarks as follows:

Reconsideration is requested of all rejections based on 35 U.S.C. 102:

Examiner has rejected claims 1-2, 5-7, 10-12, and 25 as being anticipated by Takeuchi.

We respectfully disagree with this rejection for two reasons:

(1) As noted in section 2131 of the MPEP, "...the reference must teach every element of the claim." Examiner states that "The difference between Takeuchi and that

of the claimed invention is that Takeuchi did not teach using a feedstock, which also includes ceramic powder...", so, by Examiner's own admission, every element of the claim is NOT taught by Takeuchi. Examiner's argument that certain unstated facts are well known in the art might, in some circumstances, be valid if this were a 103 rejection, but are definitely not valid in a 102 rejection.

(2) Examiner relies on Takeuchi to teach only that any low melting point resin could be removed by melting and evaporation. Our claims 1, 6, and 11, as now amended, do not teach either of these removal methods.

Reconsideration is requested of all rejections based on 35 U.S.C. 103:

For this rejection, Examiner has relied on Barros et al. in view of Wingefeld et al. arguing that "While Barros did not expressively (sic) teach removing fugitive core by vaporization or ash-free combustion, the removal of polyacetal by this process is inherently removing the core through vaporization or ash-free combustion because in this process polyacetal binder is depolymerized to form formaldehyde which can easily diffuse out of the molded part,.."

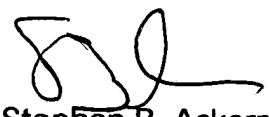
We must confess to being unable to follow Examiner's line of reasoning here. Clearly, Barros et al. teach that a fugitive core may be removed through chemical attack

by an acid gas, which is not one of the removal methods claimed by the present invention. Examiner appears to be saying that, since the product of the chemical reaction used to remove the fugitive core is a gas (as detailed in Wingefeld), therefore Barros teaches that a fugitive core may be removed by vaporization or ash-free combustion since gases are also involved in the latter two methods.

Our claims 1, 6, and 11, as now amended, teach only that a fugitive core may be removed through ash-free combustion. Acid gases cannot not used to achieve ash-free combustion nor does a teaching to use an acid gas in any way suggest that the same result could be accomplished by ash-free combustion. Stated differently, materials whose removal is best achieved through attack by an acid gas are different from materials whose removal is best achieved through ash-free combustion. Thus, it is not true that a teaching of removal by acid gas attack is equivalent to a teaching of removal through ash-free combustion. So a teaching to use an acid gas in a particular circumstance would not suggest to one skilled in the art that ash-free combustion could be used instead.

It is requested that should Examiner Mai not find that the Claims are now Allowable, he should please call the undersigned Attorney at (845)-452-5863.

Respectfully submitted



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the claims:

Please amend the following claims:

1.(twice amended) A process for forming a hollow article, comprising:

providing a mixture of metal and ceramic powders, lubricants, and binders, that form a feedstock;

using a disposable material, forming a first molded part that has an outer surface;

through powder injection molding of the feedstock, forming a second molded part that is in contact with said outer surface;

disposing of the first molded part through [vaporization or] ash-free combustion; and

heating the second molded part whereby sintering occurs and said hollow article is formed.

6.(twice amended) A process for forming a hollow article, comprising;

providing a mixture of metal and ceramic powders, lubricants, and binders, that form a feedstock;

providing tooling that is able to injection mold from a first barrel into a first mold and from a second barrel into a second mold;

using a disposable material, injected from the first barrel into the first mold, forming a first molded part that has an outer surface;

through powder injection molding of the feedstock from the second barrel into the second mold, forming a second molded part that is in contact with said outer surface;

disposing of the first molded part through [vaporization or] ash-free combustion; and

heating the second molded part whereby sintering occurs and said hollow article is formed.

11.(twice amended) A process for forming a hollow article, comprising;

providing a mixture of metal and ceramic powders, lubricants, and binders, that form a feedstock;

providing first and second tooling, one being able to injection mold from a first barrel into a first mold and one being able to injection mold from a second barrel into a second mold;

in the first tooling, using a material, [that is disposable through vaporization or ash-free combustion,] injected from the first barrel into the first mold, forming a first molded part that has an outer surface;

transferring the first molded part to the second tooling;

in the second tooling, through powder injection molding of the feedstock from the second barrel into the second mold, forming a second molded part that is in contact with said outer surface;

disposing of the first molded part through ash-free combustion; and

heating the second molded part whereby sintering occurs and said hollow article is formed.